

# ***PHEMS***

Public Health Educators in Medical Schools



**FACULTY OF  
PUBLIC HEALTH**

## **Undergraduate Public Health Curriculum for UK Medical Schools**

**Consensus Statement 2014**



**FACULTY OF  
PUBLIC HEALTH**

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“The superior physician helps before the early budding of disease.”

HUANG TI (2697-2597 BC)  
*The Yellow Emperor's Textbook of Medicine*

“The aim of medicine is to prevent disease and prolong life; the ideal of medicine is to eliminate the need of a physician.”

WILLIAM J MAYO (1861-1939)  
*Proceedings of the National Education Association*

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on behalf of participants of the joint  
*Public Health Educators in Medical Schools (PHEMS) / Faculty of Public Health (FPH) workshop on  
the undergraduate public health curriculum in medical schools*  
2 April 2013, King's College London, Guy's Campus

# Foreword

TOMORROW'S doctors will practise in changing and complex environments. Emerging diseases, an ageing population, inequalities, rising expectations among patients and the public, and changing societal attitudes will impact on how medicine is practised in the 21st century. In addition, developments in science and technological advances, such as genomics and informatics, will also influence how today's medical students – tomorrow's doctors – practise medicine.

In 2009 the General Medical Council (GMC) published an updated version of *Tomorrow's Doctors*. The content covers the development of the knowledge, skills, and behaviour that students must demonstrate by the time that they graduate, under the headings 'scientist and scholar', 'practitioner' and 'professional'. The common thread that runs through all three sections is public health. Public health education varies a great deal between medical schools though. While each medical school can design its own curriculum to suit its own circumstances, the overall curriculum must allow students to meet the outcomes specified in *Tomorrow's Doctors*. This is to ensure that graduates have the necessary knowledge, skills and behaviours to practise.

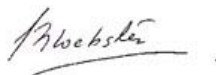
In order to facilitate public health education in medical schools in line with the outcomes prescribed in *Tomorrow's Doctors*, the Faculty of Public Health (FPH) organised a workshop in April 2013. The workshop brought together Public Health Educators in Medical Schools (PHEMS) in the UK to revisit and revise *Public Health Education for Medical Students – a Guide for Medical Schools* published in 2008. Follow-up workshops, discussions and feedback from medical educators in the UK medical schools have resulted in this document.

This document is a comprehensive guide that outlines what the undergraduate public health curriculum needs to include. It identifies what a core public health curriculum should cover to support and enhance the development of undergraduate public health education. It also describes potential educational approaches and assessment methods for public health, and opportunities for introducing public health throughout the clinical curriculum. It will be an important and useful resource for anyone working in medical education, to enable them to design a public health curriculum that incorporates the GMC recommendations.

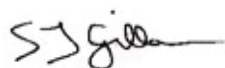
FPH is delighted with this valuable addition, which will enable medical educators to develop excellent education in public health and inspire medical students. A comprehensive public health component in medical education will ensure that tomorrow's doctors will be able to improve the health of the population as scholars and scientists, practitioners and professionals.



John R. Ashton, FPH President



Premila Webster, FPH Academic Registrar



Stephen J. Gillam, PHEMS

## 1. Introduction

*"The doctor's role must be defined by what is in the best interest of patients and of the population served. [...] All doctors have a role in the maintenance and promotion of population health, through evidence based practice. Some will enhance the health of the population through taking on roles in health education or research, service improvement and re-design, in public health and through health advocacy."* (Medical Schools Council 2008)<sup>1</sup>

Learning about the sciences underpinning public health brings substantial benefits both to the practice of clinical medicine and to the health of the population. Doctors can practise medicine more effectively, despite clinical uncertainty, by applying critical appraisal skills to their decision-making. This involves using diagnostic tests efficiently, weighing up the benefits, risks and costs of treatments, and understanding the natural history of patients' diseases, to help prevent disease and promote health in individual patients.

Doctors with a clear understanding of their role within the wider context of health and social care can influence the planning and organisation of services. They can ensure that the development and delivery of health service interventions will benefit patients and contribute to the effective and fair allocation of resources. An understanding of the wider determinants of health can enable doctors to work in partnership with local agencies and communities to advocate for interventions that will help to reduce health inequalities<sup>2</sup>.

The absence of public health practice from medical students' workplace-based learning (in contrast with the representation of other specialties) can contribute to the perception of public health as wholly distinct from the clinical role of doctors<sup>3</sup>. Previous mapping of the public health curriculum across medical schools has revealed great variability in goals, content, delivery, and modes of assessment<sup>4</sup>.

This consensus statement aims to outline a concise core public health curriculum to support and enhance the development of undergraduate public health education in medical schools, despite the variety in learning context in each school. This document also describes educational approaches and assessment methods for public health, and opportunities for introducing public health throughout the clinical curriculum.

<sup>1</sup> Medical Schools Council (MSC). The Consensus Statement. The Role of the Doctor: Past, Present and Future. (Statement supported by: Chief Medical Officers of England, Scotland, Wales and N Ireland, Academy of Medical Royal Colleges, Association of UK University Hospitals, British Medical Association, Conference of Postgraduate Medical Deans in the UK, General Medical Council, King's Fund, Medical Schools Council, NHS Employers and Postgraduate Medical Education and Training Board.) London: MSC, 2008. Available at (last accessed May 2014): <http://www.medschools.ac.uk/AboutUs/Projects/Documents/Role%20of%20Doctor%20Consensus%20Statement.pdf>

<sup>2</sup> Ali A, Wright N, Rae M [editors], on behalf of Health Inequalities Standing Group (RCGP). Addressing Health Inequalities: A Guide for General Practitioners. London: RCGP, 2008. Available at (last accessed May 2014): <http://www.lkrs.lincs.nhs.uk/HPAC/ClickCounter?action=d&resourceId=94900&url=uploads/hplincn/pdf/BK600009.pdf>

<sup>3</sup> Public Health Educators in Medical Schools (PHEMS) / Faculty of Public Health (FPH) Joint Workshop on the Undergraduate Public Health Curriculum in Medical Schools. London: 2 April 2013.

<sup>4</sup> Gillam S, Bagade A. Undergraduate public health education in UK medical schools – struggling to deliver. Medical Education 2006; 40: 430-436.

## 2. Developing the curriculum

The consensus statement fulfils the General Medical Council's (GMC) requirements in *Tomorrow's Doctors* (2009)<sup>5</sup> and outlines an indicative set of broad curricular goals for students to achieve by graduation. Foundation Year doctors must then build on these goals to achieve their key public health competencies<sup>6</sup>. This curriculum also relates to the Faculty of Public Health (FPH) curriculum (2010)<sup>7</sup> for those who enter public health specialty training. The goals have been developed following a joint workshop of the UK network of Public Health Educators in Medical Schools (PHEMS) and FPH.

This guidance document is timely given the substantial changes that have influenced the practice and education of medicine and public health. The changes are:

- Epidemiological, eg. changing patterns of disease, the ageing population
- Organisational, eg. National Health Service, public health function and social care reforms
- Political, eg. changes to the welfare state, changes in government
- Professional, eg. changes in concepts of 'professionalism'
- Social, eg. the persistent gap between rich and poor, changing public expectations
- Technological, eg. advances in genetics, therapeutics, etc.

## 3. A core curriculum for public health

In *Tomorrow's Doctors* (2009), considerable emphasis was placed on public health knowledge and skills. The core curriculum in this consensus statement is intended to provide a context for those learning outcomes and for future iterations of GMC guidance.

The learning outcomes fall within FPH's three domains of public health practice:

1. Health protection – measures to control infectious disease risks and environmental hazards, including public health emergencies
2. Health improvement – societal interventions (to promote health, including preventing disease) that are not primarily delivered through health services
3. Health services – the organisation and delivery of safe, high-quality services for prevention, treatment, and care.

Medical students need core knowledge, skills and attitudes to fulfil their public health role as doctors in the health care system. The public health-related learning outcomes of *Tomorrow's Doctors* (2009) can be usefully mapped to the FPH domains, and this helps to suggest relevant topics around which to build learning experiences/sessions (Table 1).

<sup>5</sup> General Medical Council (GMC). *Tomorrow's Doctors: Outcomes and Standards for Undergraduate Medical Education*. London: GMC, 2009. Available at (last accessed May 2014): [http://www.gmc-uk.org/education/undergraduate/tomorrows\\_doctors\\_2009.asp](http://www.gmc-uk.org/education/undergraduate/tomorrows_doctors_2009.asp)

<sup>6</sup> UK Foundation Programme Office (UKFPO). *Foundation Programme (FP) Curriculum 2012*. London: UKFPO, 2012. Available at (last accessed May 2014): <http://www.foundationprogramme.nhs.uk/pages/home/curriculum-and-assessment/curriculum2012>

<sup>7</sup> Faculty of Public Health (FPH). *Public Health Specialty Training Curriculum 2010*. London: FPH, 2010. Available at (last accessed May 2014): <http://www.fph.org.uk/uploads/2010MASTERPHCurriculum0610b.pdf>

**Table 1: Core curriculum goals mapped to Faculty of Public Health domains and General Medical Council (GMC) Tomorrow's Doctors 2009 learning outcomes along with indicative content**

Faculty of Public Health domain	Core curriculum goal	GMC <i>Tomorrow's Doctors</i> 2009 learning outcomes  <b>*(Key: Doctor as scholar &amp; scientist; Doctor as practitioner; Doctor as professional)</b>	Indicative content
<b>PUBLIC HEALTH KNOWLEDGE</b>			
<b>1. Health protection</b>  Specialty Training key area 6	To be able to protect the health of individual patients and populations against communicable disease and environmental hazards (a clinical and legal responsibility)	<b>(11.e) Explain and apply the basic principles of communicable disease control in hospital and community settings.</b>  <b>(11.g) Recognise the role of environmental and occupational hazards in ill-health and discuss ways to mitigate their effects.</b>  (23.h) Understand the importance of, and the need to keep to, measures to prevent the spread of infection, and apply the principles of infection prevention and control.	<ol style="list-style-type: none"> <li>1. What are the principles of infection prevention and control? (11e, 23h)</li> <li>2. What are the best ways to prevent the spread of communicable diseases? (11e, 23h)</li> <li>3. What is individual risk? How can risks be prevented, ameliorated, controlled, and communicated? (11e, 11g)</li> <li>4. What are the causes and consequences of accidents? How can they be prevented? (11g)</li> <li>5. What should you do when you have a patient with a notifiable disease? (11e, 23h)</li> <li>6. What should you do in an outbreak situation? (11e, 23h)</li> <li>7. How would you address environmental health concerns expressed by local communities or individual patients? (11g)</li> <li>8. What is the relationship between occupation and various health risks (e.g. occupational cancers, respiratory diseases, musculoskeletal disorders, and stress/depression/addiction)? (11g)</li> <li>9. What is the association between environmental exposures and health inequalities? (11g)</li> <li>10. What is the impact of climate change on health and healthcare systems? (11g)</li> <li>11. What are the risks to your health during an elective placement and how would you mitigate these? (11g, 23h)</li> </ol>



Faculty of Public Health domain	Core curriculum goal	GMC Tomorrow's Doctors 2009 learning outcomes  <b>*(Key: Doctor as scholar &amp; scientist; Doctor as practitioner; Doctor as professional)</b>	Indicative content
<b>2. Health Improvement</b> Speciality Training key areas 3 and 5	To be able to use key principles of population health and prevention in managing and preventing clinical conditions, and reducing inequalities	<p>(8.e) Select ways of preventing common diseases.</p> <p>(9.a &amp; 10.a) Explain human behaviour at individual and societal levels.</p> <p>(9.b &amp; 10.b) Discuss sociological and psychological concepts of health, illness and disease.</p> <p>(9.c &amp; 10.c) Apply theoretical frameworks of sociology and psychology to explain the varied responses of individuals, groups and societies to disease.</p> <p>(9.d &amp; 10.d) Explain sociological and psychological factors that contribute to illness, the course of the disease and the success of treatment – including issues relating to health inequalities, the links between occupation and health and the effects of poverty and affluence.</p> <p>(9.e &amp; 10.e) Discuss sociological and psychological aspects of behavioural change and treatment compliance.</p> <p>(11.a) Discuss basic principles of health improvement.</p> <p>(11.b) Assess how health behaviours and outcomes are affected by the diversity of the patient population.</p> <p>(11.i) Discuss the principles and application of primary, secondary and tertiary prevention of disease.</p> <p>(11.j) Discuss from a global perspective the determinants of health and disease and variations in healthcare delivery and medical practice.</p> <p>(20.e) Recognise the rights and the equal value of all people and how opportunities for some people may be restricted by others' perceptions.</p>	<p>1. What is the role of screening in the prevention of disease? (8e, 11i) How would you explain screening tests and risk to individual patients and their families? (8e)</p> <p>3. What influences behaviour in relation to health and wellbeing? (9a, 9b, 10a, 10b, 9e, 10e)</p> <p>4. What are the main approaches to health improvement, including health promotion, community development, prevention, and screening? (8e, 9e, 10e, 11a, 11i)</p> <p>5. What preventive interventions can involve you as a clinician? (8e)</p> <p>6. What are the wider determinants of health, the effects of poverty and affluence, and the impact of health inequalities at a global, national, and local level? (9b, 9c, 10b, 10c, 11a, 11j)</p> <p>7. What factors affect the patient's journey (including risk factors, seeking healthcare, treatment, rehabilitation)? (8e, 11i)</p> <p>8. How can doctors and clinical leaders best contribute to improving the health of the population? (11a, 11i)</p> <p>9. What vulnerable groups have particular health needs? What are they, and how can they be addressed? (20e)</p> <p>10. How can health equity best be promoted within a health care system? (20e)</p>

Faculty of Public Health domain	Core curriculum goal	GMC Tomorrow's Doctors 2009 learning outcomes  <b>*(Key: Doctor as scholar &amp; scientist; Doctor as practitioner; Doctor as professional)</b>	Indicative content
<b>3. Organisation of health services</b> Speciality Training key areas 3 & 4	To recognise and be able to consider the framework within which healthcare is delivered in the UK and the effect on population health	<p>(11.d) Discuss the principles underlying the development of health and health service policy, including issues relating to health economics and equity, and clinical guidelines.</p> <p>(11.j) Discuss from a global perspective the determinants of health and disease and variations in healthcare delivery and medical practice.</p> <p>(22.a) Understand and respect the roles and expertise of health and social care professionals in the context of working and learning as a multi-professional team.</p> <p>(22.b) Understand the contribution that effective interdisciplinary team working makes to the delivery of safe and high-quality care.</p> <p>(23.c) Understand the frameworks in which medicine is practised in the UK, including the organisation, management and regulation of healthcare provision; the structures, functions and priorities of the NHS; the roles of, and relationships between, the agencies and services involved in protecting and promoting individual and population health.</p> <p>(23.g) Demonstrate awareness of the role of doctors as managers, including seeking ways to continually improve the use and prioritisation of resources.</p>	<p>1. How does healthcare delivery in other parts of the world differ from the healthcare system in the UK? (11d, 11j)</p> <p>2. What is the commissioning process and why was it introduced? How effective is it in improving population health, reducing inequalities, prioritising resources effectively and ethically? (11d, 23c, 23g)</p> <p>3. What principles and skills can you use to design healthcare provision to improve population health and reduce inequalities (including commissioning and health economics principles)? (11d, 11j, 22a, 23c)</p> <p>4. In what way are international and national policies relevant to the health and wellbeing of your patients? (11j)</p> <p>5. What are the links between global and local health? (11j)</p> <p>6. How is healthcare planned, nationally, and locally, and what is the role of the clinician in this process? (11d)</p> <p>7. What are the financial and ethical issues involved in planning and prioritising the use of resources? (11d, 23c, 23g)</p> <p>8. How do we know what a population's health needs are? Who should be consulted? What does it tell you? What do you do with this information? (11d)</p> <p>9. You are a GP/local politician/patient. Which service/treatment/patient are you going to fund? Why? What informs your decision? (11d, 23c, 23g)</p> <p>10. Why do we screen for breast/cervical/bowel cancer/abdominal aortic aneurysm (AAA)? What would you advise the Government/GPs/patients regarding particular national programmes? What are the cost implications? In what ways does screening affect health? (11d, 23c)</p>

Faculty of Public Health domain	Core curriculum goal	GMC Tomorrow's Doctors 2009 learning outcomes	Indicative content
<b>4. Improving the quality of health services</b> Specialty Training key area 7	To improve the clinical effectiveness and other aspects of the quality of health services by applying the principles and methods of evaluation, audit, research and development, and standard-setting	<b>GMC Tomorrow's Doctors 2009 learning outcomes</b>  <b>*(Key: Doctor as scholar &amp; scientist; Doctor as practitioner; Doctor as professional)</b>  <b>(11.c) Describe measurement methods relevant to the improvement of clinical effectiveness and care.</b> <b>(12.b) Understand the contribution that effective interdisciplinary team working makes to the delivery of safe and high-quality care.</b> <b>(23.e) Understand and have experience of the principles and methods of improvement, including audit, adverse incident reporting and quality improvement, and how to use the results of audit to improve practice.</b> <b>(23.d) Promote, monitor and maintain health in the clinical setting, understanding how errors can happen in practice, applying the principles of quality assurance, clinical governance and risk management to medical practice and understanding responsibilities in the current systems for raising concerns about safety and quality.</b>	1. What are the principles and methods of quality improvement, and how are these applied to the development of services? <b>(11c, 22b, 23e, 23d)</b> 2. Which organisational approaches and systems are most effective in patient safety, quality assurance, clinical governance, and risk management? <b>(11c, 22b, 23e, 23d)</b> 3. What can doctors learn from significant adverse events? What are the pros and cons of different ways of assessing quality (safety, effectiveness) in healthcare systems? <b>(11c, 22b, 23e, 23d)</b>
<b>PUBLIC HEALTH SKILLS</b>			
<b>5. Epidemiology - practising evidence-based medicine</b> Specialty Training key areas 2 & 9	To use epidemiology as the basic science underpinning public health and clinical medicine; to provide evidence to guide public health policy and clinical practice to protect, restore, and promote health of	<b>(12.a) Critically appraise the results of relevant diagnostic, prognostic and treatment trials and other qualitative and quantitative studies as reported in the medical and scientific literature.</b> <b>(12.b) Formulate simple relevant research questions in biomedical science, psychosocial science or population science and design appropriate studies or experiments to address the questions.</b> <b>(12.c) Apply findings from the literature to answer questions raised by specific clinical problems.</b>	1. What different types of knowledge are relevant to public health? <b>(12a)</b> 2. What common epidemiological concepts and study designs are used for data handling and the critical appraisal of evidence? <b>(12a)</b> 3. When are quantitative, mixed, and qualitative research approaches appropriate? <b>(12a)</b> 4. How should you formulate an appropriate research question and use appropriate evidence to derive a balanced, evidence-based conclusion? <b>(12b, 12c)</b>

Faculty of Public Health domain	Core curriculum goal	GMC Tomorrow's Doctors 2009 learning outcomes	Indicative content
<b>6. Using health information</b> Specialty Training key areas 1 & 8	To use, analyse, and interpret health information to improve clinical practice	<b>GMC Tomorrow's Doctors 2009 learning outcomes</b>  <b>*(Key: Doctor as scholar &amp; scientist; Doctor as practitioner; Doctor as professional)</b>  <b>(12.d) Understand the ethical and governance issues involved in medical research.</b> <b>(14.g) Formulate a plan for treatment, management and discharge, according to established principles and best evidence.</b>	5. What are the barriers to evidence-based healthcare? <b>(12c, 14g)</b> 6. How should you deal with uncertainty in evidence? <b>(12c, 12d, 14g)</b> 7. What are the incidence and prevalence of various health-related states or events? <b>(12b, 12c)</b> 8. How can you best quantify the risk of disease (relative risk, odds ratio) and its outcome (prognosis, survival, mortality)? <b>(12b)</b> 9. How can you interpret and communicate risk appropriately, and how should epidemiological concepts inform your everyday clinical practice? <b>(12a, 12c, 12d, 14g)</b> 10. What are the common misconceptions in interpreting risk, and what is their impact on risk perception? <b>(12a, 12c, 12d)</b> 11. How can you show causal mechanisms for disease in populations (aetiology, prevention)? <b>(12a)</b>
		<b>(11.f) Evaluate and apply epidemiological data in managing healthcare for the individual and the community.</b> <b>(19.d) Access information sources and use the information in relation to patient care, health promotion, giving advice and information to patients, and research and education.</b> <b>(19.e) Apply the principles, method and knowledge of health informatics to medical practice.</b>	1. What are the various sources of epidemiological data, and how would you use these data to inform decisions relating to population and individual health? <b>(11f, 19d, 19e)</b> 2. What is the role of public health organisations (public health teams in local government; Public Health England) in the surveillance and assessment of the population's health and wellbeing? <b>(19d)</b> 3. Which data sources can be used to assess population health status and needs and how? <b>(19d, 19e)</b> 4. How would you use quantitative data handling (including statistical) skills in relation to population and individual health? <b>(11f, 19e).</b>

Faculty of Public Health domain	Core curriculum goal	GMC Tomorrow's Doctors 2009 learning outcomes	Indicative content
<b>ATTITUDES &amp; VALUES</b>			
7. Adopting public health attitudes and values  Specialty Training key area 4 & ethical management of self	To adopt a 'population perspective' in everyday clinical practice and in considering health inequalities	(20.e) Recognise the rights and equal value of all people and how opportunities for some people may be restricted by others' perceptions. (20.f) Understand and accept the legal, moral and ethical responsibilities involved in protecting and promoting the health of individual patients, their dependants and the public – including vulnerable groups such as children, older people, people with learning disabilities and people with mental illnesses. (21.a) Acquire, assess, apply and integrate new knowledge, learn to adapt to changing circumstances and ensure that patients receive the highest level of professional care. (22.b) Understand the contribution that effective interdisciplinary team-working makes to the delivery of safe and high-quality care. (15.h) Communicate effectively in various roles, for example as patient advocate, teacher, manager or improvement leader.	<ol style="list-style-type: none"> <li>1. What are the legal, moral, and ethical responsibilities involved in protecting and promoting the health of individual patients, their dependants, and the public, including vulnerable groups? (20e, 20f)</li> <li>2. What is the role of clinicians in advocacy for public health at a global, national, and local level? (15h, 20e, 20f, 21a)</li> <li>3. What are the ways in which you can advocate for your patients? (15h, 20e, 20f, 21a)</li> <li>4. What is the public health impact of drug prescribing? (20e)</li> <li>5. What is a doctor's role in policy-making? (15h, 20f, 21a, 22b)</li> <li>6. What makes an effective public health advocate? (15h, 20e, 20f, 21a)</li> <li>7. What are the ethical issues in public health, and their implications for practice? (20e, 20f, 21a)</li> <li>8. How can an interdisciplinary team contribute to safe and high-quality care (case-studies)? (22b)</li> </ol>

## 4. Learning and assessment

There is no single best curriculum design, management structure or educational approach; rather, each medical school should be able to show a coherent approach to learning and assessment. As with all elements of medical education, it is important to ensure that the curriculum is delivered using a range of educational approaches and assessments to engage students' cognitive, affective and practical capacities as well as cater for different learning styles and preferences<sup>8</sup>.

The function of the learning goals and recommended related curriculum (Table 1) is to illustrate the relevance of public health to clinical practice, and emphasise the role of doctors in protecting and improving the health of the population and reducing health inequalities. Embedding public health throughout the entire medical programme as a 'vertical strand', and integrating public health concepts into core learning in clinical practice, should help to promote a 'population perspective' as a relevant and useful tool in the doctor's repertoire.

Where feasible, opportunities for experiential learning (such as placements with community groups, charities, and social care networks) can enable students to see how a variety of social situations affect the health of the people living within them. Simulating practical scenarios in the classroom can foster a sense of participation in public health activities. Opportunities should be sought for students to interact with "strong and active role models"<sup>9</sup> from a variety of sectors.

Examples of new technologies for public health education emerging in medical schools throughout the country include e-modules, or real-time exercises using social media such as Twitter debates and discussions, developing webpages or wikis, online journal clubs, videos and webinars.

Student-selected modules can further students' interest in particular public and social health topics and methods beyond the core curriculum, including:

- Global health
- Environmental change
- Public and private systems of healthcare
- Health promotion in non-clinical settings, eg. schools, worksites, prisons and third sector
- Epidemiological research projects
- Qualitative data collection and interpretation
- Social justice.

Assessments should emphasise the importance of public health to clinical practice and follow from core learning outcomes. It is important to make use of a range of assessment modes including single best-answer questions, extended-matching questions, short-answer questions, essays/reports, posters, public health-related components in objective structured clinical examinations (OSCEs), portfolios, and reflective accounts built around patient case studies<sup>4</sup>. For example, multiple-choice or extended-matching items are well suited to examine applied epidemiological knowledge, whereas written short-answer questions and written project work support assessment of critical analysis for clinical practice and related attitudes. Specific practical public health skills can be assessed as part of OSCEs.

<sup>8</sup> The Association of Faculties of Medicine of Canada (AFMC). Public Health Task Group. An Environmental Scan of Best Practice in Public Health Undergraduate Medical Education (Prepared by the Nevis Consulting Group): Report 5: Strengths, Weaknesses, and Applicability of Teaching Methods in Public Health. Toronto: AMC, 2009. Available at (last accessed May 2014): <http://www.afmc.ca/social-public-health-e.php>

<sup>9</sup> Atkinson S, Cottam B (Royal College of General Practitioners (RCGP)). How doctors can close the gap: Tackling the social determinants of health [Conference report from Royal College of Physicians, 10 June 2010]. Clinical Medicine 2011; 11(1): 57-60. Available at (last accessed May 2014): <http://rcpjournals.org/content/11/1/57.full.pdf+html>

## 5. Who is a public health educator?

Varying capacity within public health departments may not allow educational delivery by public health specialists at all levels of the curriculum. Public health education could involve a range of departments and disciplines focused on populations and community health (for example, primary healthcare, occupational and environmental health, child health, clinical epidemiology, biostatistics, health services research, health promotion, health economics, behavioural sciences, demography, ethics, education, social policy and sociology). Working closely with colleagues from other clinical specialties and disciplinary backgrounds increases public health educator capacity within medical schools, and illustrates the clinical relevance of public health and its relationship with other disciplines.

Facilitators of problem-based learning (PBL) groups (and other such student-centred learning approaches) may need support (educator development workshops or written guidance) in understanding how to prompt students towards considering public health aspects in case scenarios. Irrespective of who is responsible for public health education, a named public health specialist lead within each medical school should provide oversight of public health learning outcomes across the whole curriculum to ensure coherence and constructive alignment (between intended outcomes, what students learn, and what is assessed).

The educational contributions of service public health specialists and other NHS clinicians are supported by FPH. The GMC's *Good Medical Practice*<sup>10</sup> states that all doctors "should be prepared to contribute to teaching and training doctors and students" (paragraph 39). Sharing public health expertise and promoting a public health approach is an important role for public health consultants, to ensure a population approach is understood by and fostered in the doctors and commissioners of tomorrow, as well as inspiring the new generation of medical doctors in specialty training. FPH development programmes and support structures will be important to support a community of public health educators, both locally and nationally through the PHEMs network.

<sup>10</sup> GMC (2013). Good Medical Practice. Available at (last assessed May 2014): [http://www.gmc-uk.org/guidance/good\\_medical\\_practice.asp](http://www.gmc-uk.org/guidance/good_medical_practice.asp)

## Public Health Educators in Medical Schools (PHEMS) / Faculty of Public Health (FPH) joint workshop on undergraduate public health curriculum in medical schools 2 April 2013 King's College London, Guy's Campus

### Workshop participants:

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